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June 16, 2026

Edina & Yuvinalis Mosomi

Re: Limited Structural Inspection
2053 Stillwood Drive
Youngsville, NC

Dear Mr. and Ms. Mosomi:

At your request, a limited structural inspection of the above property was performed on June 15, 2026. The report that follows has been prepared based on that inspection. The inspection was performed by Ryan Henson, EI of Giles Flythe Engineers.

The scope of this project was limited to the inspection and evaluation of the rear screened-in porch and general structural concerns in the crawl space framing/foundation components. The report is intended to cover only those premises that may be examined visually without excavation, removing surface materials, and disassembling components.

No tests, measurements, or calculations have been made except as described in this report. We have not investigated for toxic materials/wastes or examined public records regarding this property. The scope of the inspection does not assure that the property conforms to any regulations, restrictions, or building codes that may be in effect at its location.

DESCRIPTION

The two-story, wood-framed home (with a crawl space) is constructed on perimeter masonry foundation walls with masonry piers supporting floor girders. The house was built in 2001 according to Franklin County Real Estate Tax Records. For purposes of this report, all directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing outside and facing the front door of the home.

Upon our arrival, access to the interior was provided by the seller's agent. The items detailed above in the scope were subsequently inspected.

Note that the original builder was not interviewed and no plans for the construction of this home were provided. The information presented in this report is gathered from the conditions visible at the site, as they existed at the time of the inspection. A limited photo log is included with this report.

OBSERVATIONS

Interior:

1. Multiple minor cracks/separations (less than 1/16" wide) were observed in the wall/ceiling finish materials throughout the home.

Garage:

2. A leaning/displaced post was observed at the front-right corner of the garage staircase landing.
3. Buckled/bulging drywall was observed at the rear wall of the garage.

Exterior:

4. The rear screened-in porch was constructed on a deck structure.
 - a. The screened-in porch wall/roof structure appeared to be retrofit/makeshift with multiple structural deficiencies including, but not limited to, undersized roof framing, inadequate connections, and a lack of lateral bracing.
 - b. The deck was reported to be original to the main structure (2001). Visible inspection of the deck was limited due to low clearance.
5. A crack (up to 1/16" wide) was observed in the brick masonry at the right perimeter wall located approximately 0'-8" from the front perimeter wall.
6. Gutters and downspouts (with leaders) were noted installed on the home. Grade was noted with a relatively negative slope towards the rear perimeter walls and a relatively positive slope away from the front perimeter walls of the home.

Crawl Space:

7. The floor framing was noted to consist of 2x10 floor joists spaced at 16" on-center generally spanning front to rear supported by 3-ply 2x10 drop girders bearing on masonry piers.
8. Outward bulging of the cripple wall sheathing was observed above the right foundation wall.
 - a. Outward leaning (up to 1/4" horizontal over 6" vertical) was measured in the right cripple wall.
9. The vapor barrier was observed to be discontinuous throughout the crawl space, resulting in exposed soil. Evidence of moisture intrusion in the form of efflorescence and water staining was noted on the perimeter foundation walls. Water staining and what appeared to be organic substances were also noted on the wood framing. Multiple moisture content readings (up to 17.6%) were taken in the floor framing with a General MMD4E moisture meter.

DISCUSSION

The minor interior wall/ceiling finish material cracks/separations noted above (Observation #1) are likely the result of the supporting members contracting/deflecting. Minor drywall cracking and finish carpentry separations are typically associated with changes in weather, temperature and humidity causing wood to shrink and swell with the seasons. Repeated seasonal cycles can also cause drywall tape to lose its adhesive properties. When moisture is taken away from wood it has a tendency to contract thus resulting in deflection (or sagging). Any walls, windows or doors bearing on the deflected members will also move. We do not consider the interior wall/ceiling finish material cracks/separations to be a structural concern.



The leaning garage staircase landing post noted above (Observation #2) is likely due to a lack of attachment at the base of the post and vertical loading on the landing. If left in the existing condition, the post may continue to displace and leave the landing unsupported at this location, resulting in a potential failure of the landing structure. This is considered a structural concern and a recommendation for repair has been provided below.

The buckled drywall noted above (Observation #3) is not does not appear to be indicative of a structural concern. The buckled drywall appears to be isolated to the finish material and is likely due to insufficient fastening of the drywall material to the framing. No damage was discovered in the crawlspace at this location. Note, we are unable to confirm there are no structural concerns present at this location as the majority of the framing is concealed by finishes. If desired, the finish materials can be removed to expose the framing behind the area of buckled drywall. It is possible that upon further evaluation the results may be inconclusive.

The construction of the rear deck/screened-in porch structure noted above (Observation #4) does not meet current residential building code requirements. There are multiple structural concerns related to the deck/porch as noted above. Under normal loading (wind, snow, large gatherings) large deflections in the deck and roof structure are likely. The deck structure was reported to be original to the home (approx. 25 yrs. old) and has likely reached the end of its useful life and should be replaced. We have provided a recommendation below for this. Design of a new deck is beyond the scope of this limited structural inspection.

The crack in the brick masonry noted above (Observation #5) is likely due to limited differential foundation settlement. The clay soils in this area are considered "expansive" type soils and will typically expand and contract with fluctuations in the moisture content. This expansion and contraction of load bearing soil materials below foundations can lead to soil consolidation and foundation cracking. If conditions around the foundation remain relatively dry, the likelihood of future significant settlement will be reduced, but we cannot predict the extent of future settlement. Ensuring proper exterior drainage and monitoring for additional settlement is an acceptable approach at this time.

Positive grade away from the foundation should be maintained/created to reduce moisture infiltration under the foundation. Additional soil consolidation and foundation movement or settlement can occur due to water infiltration into soils and subsequent drought conditions which dry out the soils below foundations. Maintaining positive drainage away from the perimeter foundation walls is vital to the long-term structural integrity of the foundation.

The bowed sheathing and leaning at the cripple wall noted above (Observation #8) is likely due to original construction methods and vertical loading. The sheathing was likely not sufficiently fastened to the cripple wall, allowing for the bowing, this is considered a structural concern. If left in the existing condition, racking of the cripple wall may occur, resulting in further structural damage.

The leaning observed at the cripple wall is not considered a structural concern at this time. We have provided a recommendation below to replaced the cripple wall sheathing and to monitor the wall for continued leaning/movement.



The moisture content of the floor framing noted in the crawl space at the time of the inspection is considered elevated (greater than 15.0%). Moisture levels of the framing can fluctuate based on weather conditions and seasonal changes in humidity. Prolonged elevated moisture content of the framing can lead to excessive deflection and structural damage. We have provided a recommendation below to help further dry out the crawl space.

The recommendations presented in this report are based on our experience and understanding of the concerns to provide a reasonable solution based on the conditions that were visible and/or known to us on the date of inspection. As this report is based on the circumstances at one point in time, conditions may change which may alter our opinions or result in additional repair recommendations. Further, the recommendations are the opinion of the Engineer to address structural-related concerns and may not rectify cosmetic issues.

RECOMMENDATIONS

The contractor should verify all dimensions prior to ordering materials. If there are any questions or concerns regarding location or method of repair contact the engineer prior to construction.

1. Regarding the displaced garage staircase landing post noted above (Observation #2), we recommend replumbing the post and installing (2) Simpson RPBZ Retrofit Post Bases (or approved equivalent) per the manufacturer's specifications at opposite corners of the post.
2. We recommend hiring an experienced contractor to replace the rear deck in accordance with Chapter 47 of the 2024 NC Building Code: Residential Code.
3. We recommend replacing the bowed cripple wall sheathing at the right foundation wall noted above (Observation #8) with new plywood/OSB sheathing of equivalent thickness, across at least three (3) cripple wall studs. Attach the new wall sheathing to the wall studs with 8d nails spaced at 6" on-center. Install 2x ladder blocking between the wall studs as required to support the new sheathing panel edges.
 - a) Monitor the cripple wall for continued leaning/movement. If movement is discovered, we recommend contacting a structural engineer for further evaluation.
4. To help further reduce and regulate moisture levels in the crawl space, we recommend extending the vapor barrier throughout the crawl space to cover 100% of the exposed soil. We recommend adjusting the foundation vents as needed. We recommend ensuring the foundation vents are clear of debris to allow air circulation.
5. Monitor the cracks in the exterior brick masonry noted above. If the crack widens significantly (expands by an additional 1/8") or additional significant cracks (greater than 1/4" wide) propagate, then further evaluation by a structural engineer is recommended.
6. We recommend ensuring that stormwater drains positively away from the home to minimize the risk of future water infiltration. This can be accomplished by ensuring gutters, downspouts, and leaders remain clear of debris and properly functioning. Also, maintaining/creating a positive grade, where possible, away from the perimeter of the home will aid in the stormwater evacuation.



General Notes:

- All new metal hangers/ties/clips to be installed per manufacturer specifications.
- All repairs should be installed in accordance with the 2024 NC Building Code: Residential Code.
- With any structural changes, finish material cracks and minor movements are typical and expected. These are associated with settlement and allowable deflection generally observed after construction of an addition or significant remodel/repair.

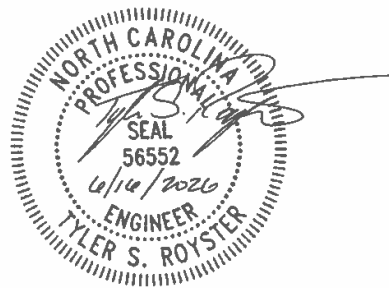
CONCLUSION

We trust that this report provides the information you require. Please contact us at 919-465-3801 if you have any questions. Thank you for the opportunity to be of assistance to you.

Sincerely,



Ryan Henson, EI
Project Engineer
Giles Flythe Engineers Inc.
NC Lic. No. C-2871



Tyler S. Royster, PE
Project Manager
Giles Flythe Engineers Inc.
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Enclosed: Limited Photo Log



Description

General view of the front
of the home (for
reference).

Photo No.
1



Description

Typical view of a minor
interior finish material
crack.

Photo No.
2

